

AMENDMENTS TO THE CLAIMS

1. - 41. **(Canceled)**

42. **(Previously Presented)** A lipopeptide comprising a polypeptide conjugated to one or more lipid moieties wherein:

(i) said polypeptide comprises an amino acid sequence that comprises:

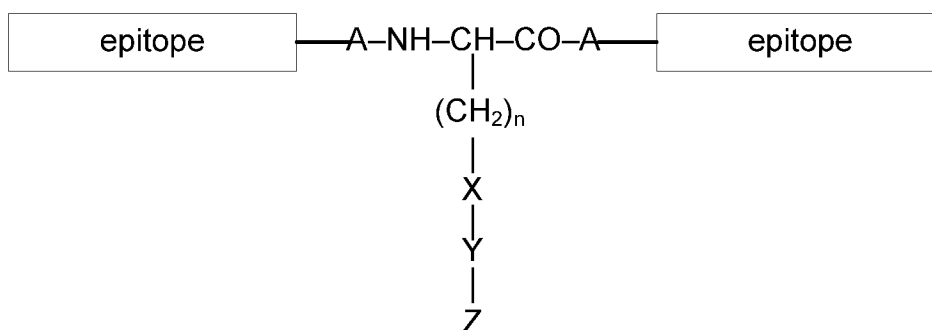
(a) an amino acid sequence of a T helper cell (Th) epitope and an amino acid sequence of a B cell epitope, wherein said amino acid sequences are different; and

(b) one or more internal lysine residues for covalent attachment of each of said lipid moieties via an epsilon-amino group of said one or more lysine residues;

(ii) each of said one or more lipid moieties is covalently attached to the epsilon-amino group of said one or more internal lysine residues; and

(iii) said lipopeptide has the general Formula (VI):

Formula (VI):



wherein:

epitope is the T-helper epitope or B-cell epitope;

A is either present or absent and consists of an amino acid spacer of about 1 to about 6 amino acids in length;

n is an integer having a value of 1, 2, 3, or 4;

X is a terminal side-chain group selected from the group consisting of NH, O and S;

Y is either present or absent and consists of a spacer of about 1 to about 6 amino acids in length, wherein said spacer comprises arginine, serine or 6-aminohexanoic acid; and

Z is a lipopeptide moiety selected from the group consisting of Pam2Cys, Pam3Cys, Ste2Cys, Lau2Cys, and Oct2Cys.

43. **(Original)** The lipopeptide of claim 42 wherein A is absent.
44. **(Original)** The lipopeptide of claim 43 wherein the B cell epitope comprises the amino acid sequence set forth in SEQ ID NO: 2 or SEQ ID NO: 3 or SEQ ID NO: 4.
45. **(Original)** The lipopeptide of claim 43 wherein: (i) the B cell epitope comprises the amino acid sequence set forth in SEQ ID NO: 101; (ii) Y is present and consists of a serine homodimer; and (iii) Z consists of Pam₂Cys.
46. **(Previously Presented)** The lipopeptide of claim 45 wherein the T helper epitope comprises an amino acid sequence set forth in SEQ ID NO: 24 and wherein the lipid moiety is attached to the polypeptide via the epsilon-amino group of a lysine residue within SEQ ID NO: 24.
47. **(Original)** The lipopeptide of claim 45 wherein the lipid moiety is attached to the polypeptide via Lys-14 of SEQ ID NO: 24.
48. **(Original)** The lipopeptide of claim 43 wherein: (i) the B cell epitope comprises the amino acid sequence set forth in SEQ ID NO: 102; (ii) Y is present and consists of a serine homodimer; and (iii) Z consists of Pam₂Cys.
49. **(Previously Presented)** The lipopeptide of claim 42 capable of upregulating surface expression of at least one MHC class II molecules on immature dendritic cells (DC).

50. **(Original)** The lipopeptide of claim 49 wherein the DC are D1 cells.

51.- 82. **(Canceled)**

83. **(Original)** A contraceptive agent comprising the lipopeptide according to claim
44.

84. - 94. **(Canceled)**

95. **(Original)** A vaccine comprising the lipopeptide according to claim 45.

96. - 114. **(Canceled)**